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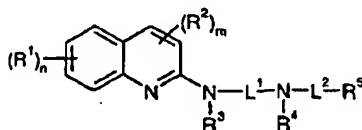
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[Continued on next page]

(54) Title: MCHIR ANTAGONISTS



(I)

(57) Abstract: The present invention provides compounds of formula (I), wherein R^1 represents a C_{1-4} alkoxy group optionally substituted by one or more fluoro or a C_{1-4} alkyl group optionally substituted by one or more fluoro; n represents 0 or 1; R^2 represents a C_{1-4} alkyl group optionally substituted by one or more fluoro or a C_{1-4} alkoxy group optionally substituted by one or more fluoro; m represents 0 or 1; R^3 represents H or a C_{1-4} alkyl group; L^1 represents an alkylene chain $(CH_2)_r$, in which r represents 2 or 3 or L^1 represents a cyclohexyl group wherein the two nitrogens bearing R^3 and R^4 , respectively, are linked to the cyclohexyl group either via the 1,3 or the 1,4 positions of the cyclohexyl group or L^1 represents a cyclopentyl group wherein the two nitrogens bearing R^3 and R^4 , respectively, are linked to the cyclopentyl group via the 1,3 position of the cyclopentyl group and additionally when R^5 represents 9, 10-methanoanthracen-9(10H)-yl the group $-L^1-N(R^4)-$ together represents a piperidyl ring which is linked to L^2 through the piperidyl nitrogen and to $N-R^3$ via the 4 position of the piperidyl ring with the proviso that when R^5 represents 9, 10-methanoanthracen-9(10H)-yl then r is only 2; R^4 represents H or a C_{1-4} alkyl group optionally substituted by one or more of the following: an aryl group or a heteroaryl group; L^2 represents a bond or an alkylene chain $(CH_2)_s$, in which s represents 1, 2 or 3 wherein the alkylene chain is optionally substituted by one or more of the following: a C_{1-4} alkyl group, phenyl or heteroaryl; R^5 represents aryl, a heterocyclic group or a C_{3-6} cycloalkyl group which is optionally fused to a phenyl or to a heteroaryl group; as well as optical isomers and racemates thereof as well as pharmaceutically acceptable salts, thereof; with provisos, processes for preparing such compounds, their use in the treatment of obesity, psychiatric disorders, cognitive disorders, memory disorders, schizophrenia, epilepsy, and related conditions, and neurological disorders such as dementia, multiple sclerosis, Parkinson's disease, Huntington's chorea and Alzheimer's disease and pain related disorders and to pharmaceutical compositions containing them.



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Published:

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

Internat	Location No
PCT/GB	03/02884

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/47 C07D215/38 C07D409/12 C07D401/12 C07D407/12
 A61K31/4709 A61P3/04 A61P25/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data, EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 55677 A (SMITHKLINE BEECHAM PLC, UK) 4 November 1999 (1999-11-04) cited in the application examples 1A,27A,29A,33B,62D	1,21
X	WO 97 43278 A (NOVO NORDISK A/S, DEN.;ANKERSEN, MICHAEL; STIDSEN, CARSTEN ENGGAARD; A) 20 November 1997 (1997-11-20) example 4 --- -/-	21

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- *A* document member of the same patent family

Date of the actual completion of the international search

17 September 2003

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International Application No
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C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	& WO 01 082925 A 8 November 2001 (2001-11-08)	1-21

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 03/02884

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claim 18 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

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